Docket No. A018 US

Applicants: Gotwals, et al. Application No.: 09/423,018 Filed: October 12, 2000

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplicants:

Gotwals, et al.

Application No.:

09/423,018

Group Art Unit:

1646

Filed:

October 12, 2000

Examiner:

Janet L. Andres Ph.D.

Title:

TYPE II TGF-BETA RECEPTOR/IMMUNOGLOBULIN CONSTANT

REGION FUSION PROTEINS

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION OF RICHARD CATE, Ph. D

I, Richard Cate, being duly sworn, depose and state as follows.

- 1. I am an Applicant named in the above-identified patent application. I have reviewed and am familiar with the contents of the April 20, 2004 Office Action issued in connection with the patent application. I have also reviewed the *Lin* and *Jacobs* references which have been cited by the Examiner in the April 20, 2004 Office Action.
- 2. In my opinion, as of April 18, 1997, those of ordinary skill in the art would not have been motivated to combine *Lin* and *Jacobs* in the manner suggested by the Examiner. Nor would skilled artisans at the time have had a reasonable expectation that combining *Lin* and *Jacobs* as suggested by the Examiner would yield functional fusion proteins within the scope of my invention.
- 3. As of April 18, 1997, there were five known mammalian type II receptors of the TGF-β receptor family: TGF-βRII (which binds the ligand TGF-β and is also referred to as TβR-II); ActR-II and ActR-IIB (which bind the ligands activin, inhibin, and some BMPs); BMPR-II (which binds some BMPs); and AMH-RII (which binds AMH (MIS)). See Josso and di Clemente, Current Opinion in Genetics and Development, Vol. 7, pp. 371-377(June, 1997)(copy attached).